

What can I do with a major in PHYSICAL SCIENCES?

SKILLS AND KNOWLEDGE THAT PHYSICAL SCIENCES GRADUATES POSSESS:

- knowledge of soil, fluid and groundwater mechanics, as well as sample collection, preparation and analysis
- understanding of the Alberta oil and gas industry developments and challenges
- time and project management skills
- ability to communicate technical information to technical and non-technical audiences
- experience organizing, analyzing and interpreting scientific data

It is important to enhance and diversify your skills and knowledge with work, volunteer, research and field study experiences while in university.

EXAMPLES OF CAREER PATHS PHYSICAL SCIENCES GRADUATES HAVE PURSUED:

Physical Sciences graduates can pursue a variety of career paths, including those that might not seem to have a direct connection to physical sciences at first glance. The following is a non-exhaustive list of some examples:

DIRECT career paths: The skills and knowledge acquired in a physical sciences education are often required or considered an asset in the following positions.	LESS DIRECT career paths: The generic skills and knowledge obtained in a physical sciences education are pertinent in the following positions.	The following paths may require FURTHER STUDY or SPECIALIZED TRAINING* in addition to a Bachelor of Science in physical sciences.
Laboratory Analysts conduct chemical and physical laboratory tests to assist in making qualitative and quantitative analyses of solids, liquids, and gaseous materials. They work in testing facilities or engineering firms.	Research Grant Administrators coordinate the promotion, application submission, selection and awarding of research grants. They work at post-secondary education institutions or research institutes.	Public Health Inspectors identify and evaluate immediate and potential health hazards, and promote human health through consultation, education and enforcement of legislation. They work for regional health authorities or CIFA.
Environmental Consultants ensure the organization complies with all the environmental, health and safety regulations in the design and implementation of its projects. They work for consulting firms or oil and gas companies.	Science Educators develop, plan and deliver science education programs to the general public. People with a science background, along with education, drama or communication experience are ideal for this role. They work in science centres, natural history museums or zoos.	Hydrogeologists apply scientific knowledge, and mathematical and physical principles to solve groundwater-related problems. They work for environmental consulting firms, engineering firms or environmental regulatory bodies.
Quality Assurance Specialists coordinate the establishment and implementation of quality assurance procedures. They also monitor and report on potential risks related to quality assurance. They work in various industries, from oil and gas to manufacturing.	Business Development/Client Relationship Managers foster and maintain relationships with current and future clients. They also conduct research in the regional market to identify potential opportunities. Environmental or technical consulting firms seek graduates from science programs with strong business acumen for these positions.	Agrologists apply scientific principles to the cultivation, production, utilization and improvement of plants and animals, and the management of associated resources. They work in the public sector as well as environmental, agricultural or engineering companies
Occupational Hygienists use scientific methodology to identify and evaluate workplace exposures and hazards. They recommend changes to work environments and processes to reduce or eliminate the exposures to occupational hazards. They work in the health and safety departments of various industrial organizations.	<i>*NOTE: Qualifications for similar jobs might vary depending on the employer. Try checking with the employer(s) you're interested in working for to see what they require and recommend in terms of education and/or experience.</i>	Science Consultants offer project-based advice and expertise to help companies with science-related decisions. Their work varies greatly between projects and can range from proposal writing, literary review, to planning, assessment, and research. They are often self-employed or work with consulting agencies.

<p>Public Policy Analysts review and analyze information and proposals to prepare briefings and presentations regarding a specific issue to help inform policy makers in their decision-making process. They work for municipal, federal and provincial governments.</p>	<p>Science journalists communicate scientific materials to the lay public or professional audiences. Science journalists are often multimedia professionals who use social media, photography, and videography to tell their stories. They can be independent contractors or work for various media outlets (magazines, publishers, radio and television outlets, and digital news services), science organizations or educational institutions.</p>	<p>Material Scientists apply the principles of physics and engineering as well as chemistry to study all aspects of materials to develop new products or enhance existing ones. They also determine ways to strengthen or combine materials or develop new materials for use in a variety of products. They often work in the research and development teams or testing labs of various manufacturing firms.</p>
<p>Waste Management Specialists plan, implement, and coordinate comprehensive waste management systems that are designed to maximize waste prevention, reuse, and recycling opportunities. They often work for environmental and engineering consulting firms, waste management and recycling firms, as well as governments.</p>		

WANT MORE INFORMATION? CHECK OUT THE FOLLOWING RESOURCES:

Available in MacEwan University Libraries:

- Career Opportunities in Science – *Susan Echaore-McDavid*
- Green Careers: Choosing Work for a Sustainable Future – *Jim Cassio & Alice Rush*
- Science Careers: Personal Accounts from the Experts – *Richard Savage*
- Guide to Nontraditional Careers in Science – *Kirk St. Amant*

Additional Resources (Available Online):

- ECO Canada: Environmental Careers Organization of Canada
- CLRA/ ACRSD: Canadian Land Reclamation Association
- Canadian Heritage Information Network
- CASW: Council for the Advancement of Science Writing

WANT TO DISCUSS YOUR OPTIONS WITH SOMEONE?

- Book an appointment with a [career advisor in the C&E office](#)
- Talk to a [physical sciences advisor](#)

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